## AMENDMENTS TO THE CLAIMS

Claims 1-36 (Cancelled).

## 37. (Currently Amended) A compound of the formula

wherein

R<sub>1</sub> is hydrogen, halo a halogen or nitro,

R<sub>2</sub> is C<sub>4</sub>-C<sub>20</sub> aryl, and

 $R_3$  is  $C_1-C_{30}$  alkyl,  $C_2-C_{22}$  alkenyl,  $C_4-C_{20}$  aryl,  $OR_4$ ,  $SR_4$ ,  $NR_4R_5$ ,  $(CH_2)_nOR_4$ ,

 $(CH_2)_nSR_4$ ,  $(CH_2)_nNR_4R$  or  $(CH_2)_nCOR_5$ 

wherein

n is 0-10; and

 $R_4$  and  $R_5$ , which can be the same or different, are hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_6$  alkenyl or  $C_4$ - $C_{10}$  aryl.

- 38. (Previously Presented) The compound of claim 37, wherein  $R_3$  is  $C_1$ - $C_6$  alkyl or  $C_1$ - $C_6$  alkoxy.
- 39. (Previously Presented) The compound of claim 37, wherein  $R_1$  is hydrogen,  $R_2$  is  $C_4$ - $C_{20}$  aryl, and  $R_3$  is methyl.
- 40. (Previously Presented) The compound of claim 37, wherein  $R_1$  is hydrogen,  $R_2$  is  $C_4$ - $C_{20}$  aryl, and  $R_3$  is ethyl.
- 41. (Previously Presented) The compound of claim 37, wherein  $R_1$  is hydrogen,  $R_2$  is  $C_4$ - $C_{20}$  aryl, and  $R_3$  is cyclopropyl.

- 42. (Previously Presented) The compound of claim 37, wherein  $R_1$  is hydrogen,  $R_2$  is  $C_4$ - $C_{20}$  aryl, and  $R_3$  is cyclobutyl.
- 43. (Previously Presented) The compound of claim 37, wherein  $R_1$  is hydrogen,  $R_2$  is  $C_4$ - $C_{20}$  aryl, and  $R_3$  is methoxy.
- 44. (Previously Presented) The compound of claim 37, wherein  $R_1$  is hydrogen,  $R_2$  is  $C_4$ - $C_{20}$  aryl, and  $R_3$  is ethoxy.
- 45. (Previously Presented) The compound of claim 37, wherein  $R_1$  is hydrogen,  $R_2$  is  $C_4$ - $C_{20}$  aryl, and  $R_3$  is amino.
- 46. (Previously Presented) The compound of claim 37, wherein  $R_1$  is hydrogen,  $R_2$  is  $C_4$ - $C_{20}$  aryl, and  $R_3$  is dimethylamino.
- 47. (Previously Presented) The compound of any of claims 38-46, wherein R2 is selected from the group consisting of phenyl, 4-(fluorophenyl), 3-(fluorophenyl),
- 2-(fluorophenyl), 4-(chlorophenyl), 3-(chlorophenyl), 4-(methylphenyl),
- 3-(methylphenyl), 2-(methylphenyl), 4-(methoxyphenyl), 3-(methoxyphenyl),
- 2-(methoxyphenyl), 4-(ethoxyphenyl), 3-(ethoxyphenyl), 2-(ethoxyphenyl), 4-(vinylphenyl),
- 4-(acetylphenyl), 3-(acetylphenyl), 2-(acetylphenyl), 4-(trifluoromethylphenyl),
- 3-(trifluoromethylphenyl), 4-(trimethylsilylphenyl), 3-(trimethylsilylphenyl),
- 4-(methylthiophenyl), 4-(tert-butylphenyl), 4-(dimethylaminophenyl), 4-(ethylphenyl),
- 4-(benzoxyphenyl), 4-(biphenyl), 2-furanyl, 2-(thiophenyl), 2-(5-methylthiophenyl),
- 3-(thiophenyl), 2-(indolyl), 1-(naphthalenyl), 2-(naphthalenyl), 4-(dibenzofuranyl),
- 1-(thianthrenyl), 2,3-(dichlorophenyl), 2,5-(dichlorophenyl), 3,4-(dichlorophenyl),
- 3,5-(dichlorophenyl), 2,3-(difluorophenyl), 2,4-(difluorophenyl), 2,5-(difluorophenyl),
- 2,6-(difluorophenyl), 3,4-(difluorophenyl), 3,5-(difluorophenyl), 3,5-(dibromophenyl),
- 3,5-(bis(trifluoromethyl)phenyl), 2,3-(dimethylphenyl), 2,5-(dimethylphenyl),
- 2,6-(dimethylphenyl), 3,5-(dimethylphenyl), 2,4-(dimethoxyphenyl), 2,5-(dimethoxyphenyl),
- 3,4-(dimethoxyphenyl), 2,3,4-(trimethoxyphenyl), 2,4,6-(trifluorophenyl), and
- 2,3,4,5,6-(pentaflurophenyl).
- 48. (Previously Presented) The compound of claim 37, wherein the compound is N-(2-(2-(4-fluorophenyl)-5-methoxy-1H-indol-3-yl)ethyl)acetamide.

- 49. (Previously Presented) The compound of claim 37, wherein the compound is N-(2-(5-methoxy-2-methoxyphenyl-1H-indol-3-yl)ethyl)acetamide.
- 50. (Previously Presented) The compound of claim 37, wherein the compound is N-(2-(5-methoxy-2-p-tolyl-1H-indol-3-yl)ethyl)acetamide.
- 51. (Previously Presented) The compound of claim 37, wherein the compound is N-(2-(2-(4-tert-butylphenyl)-5-methoxy-1H-indol-3-yl)ethyl)acetamide.
- 52. (Previously Presented) The compound of claim 37, wherein the compound is N-(2-(2-(3-trifluoromethylphenyl)-5-methoxy-1H-indol-3-yl)ethyl)acetamide.
- 53. (Previously Presented) The compound of claim 37, wherein the compound is N-(2-(2-(4-trifluoromethylphenyl)-5-methoxy-1H-indol-3-yl)ethyl)acetamide.
- 54. (Currently Amended) A method for preparing the compound of claim 37, which method comprises comprising reacting a 2-halo melatonin with aryl boronic acid in the presence of palladium catalyst.
- 55. (Currently Amended) A method for preparing the compound of claim 38, which method comprises comprising reacting a 2-halo melatonin with aryl boronic acid in the presence of palladium catalyst.
- 56. (Previously Presented) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 37 and a pharmaceutically acceptable carrier or diluent.
- 57. (Previously Presented) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 38 and a pharmaceutically acceptable carrier or diluent.
- 58. (Previously Presented) The pharmaceutical composition of claim 57, wherein the pharmaceutical composition comprises nanoparticles of the compound of claim 37.
- 59. (Previously Presented) The pharmaceutical composition of claim 58, wherein the pharmaceutical composition comprises nanoparticles of the compound of claim 38.

- 60. (Previously Presented) The pharmaceutical composition of claim 57, wherein the pharmaceutical composition comprises an anesthetic inducing effective amount of the compound of claim 37 and a pharmaceutically acceptable anesthetic carrier.
- 61. (Previously Presented) The pharmaceutical composition of claim 58, wherein the pharmaceutical composition comprises an anesthetic inducing effective amount of the compound of claim 38 and a pharmaceutically acceptable anesthetic carrier.
- 62. (Currently Amended) A method of inducing sedation, hypnosis and/or sleep, or general anesthesia in a patient, which method comprises comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 57.
- 63. (Currently Amended) A method of inducing sedation, hypnosis and/or sleep, or general anesthesia in a patient, which method comprises comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 58.
- 64. (Currently Amended) The method of claim 63, wherein said administering <u>step</u> is <u>completed</u> by a method selected from the group consisting of oral administration, nasal respiratory administration, bolus injection, intravenous administration, continuing infusion, rectal administration, vaginal administration, sublingual administration, and cutaneous administration.
- 65. (Currently Amended) The method of claim 64, wherein said administering <u>step</u> is <u>completed</u> by a method selected from the group consisting of oral administration, nasal respiratory administration, bolus injection, intravenous administration, continuing infusion, rectal administration, vaginal administration, sublingual administration, and cutaneous administration.
- 66. (Currently Amended) A method for treating sleep disorders or chronobiological disorders in a patient, which method comprises comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 57.
- 67. (Currently Amended) A method for treating sleep disorders or chronobiological disorders in a patient, which method comprises comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 58.
- 68. (Currently Amended) A method for treating a condition affected by melatonin activity in a patient, which method comprises comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 57.

- 69. (Currently Amended) A method for treating a condition affected by melatonin activity in a patient, which method comprises comprising administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 58.
- 70. (Previously Presented) The method of claim 69, wherein the condition affected by melatonin activity is selected from the group consisting of depression, epilepsy, jet-lag, work-shift syndrome, sleep disorders, glaucoma, reproduction, cancer, premenstrual syndrome, immune disorders, inflammatory articular diseases, neurodegenerative diseases of the central nervous system, and neuroendocrine disorders.
- 71. (Previously Presented) The method of claim 70, wherein the condition affected by melatonin activity is selected from the group consisting of depression, epilepsy, jet-lag, work-shift syndrome, sleep disorders, glaucoma, reproduction, cancer, premenstrual syndrome, immune disorders, inflammatory articular diseases, neurodegenerative diseases of the central nervous system, and neuroendocrine disorders.

## 72. (Currently Amended) A compound of the formula

wherein

R<sub>1</sub> is hydrogen or halo a halogen,

 $R_2$  is  $C_4$ - $C_{20}$  aryl, and

 $R_3$  is  $C_1-C_{30}$  alkyl,  $C_2-C_{22}$  alkenyl,  $C_4-C_{20}$  aryl,  $OR_4$ ,  $SR_4$ ,  $NR_4R_5$ ,  $(CH_2)_nOR_4$ ,

 $(CH_2)_nSR_4$ ,  $(CH_2)_nNR_4R$  or  $(CH_2)_nCOR_5$ 

wherein

n is 0-10; and

 $R_4$  and  $R_5$ , which can be the same or different, are hydrogen,  $C_1$ - $C_8$  alkyl,  $C_1$ - $C_6$  alkenyl or  $C_4$ - $C_{10}$  aryl.

This listing of claims replaces all prior versions and listings of claims in the application.